WHAT IS CLAIMED IS:

1. A portable DNA sequence comprising a series of nucleotides capable of directing intracellular production of metalloproteinase inhibitors.

2. The portable DNA sequence of claim 1 wherein said sequence is capable of directing intracellular production of collagenase inhibitors.

3. The portable DNA sequence of claim 1 wherein said nucleotide sequence is:

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        10         20         30         40         50         60
GTTGTTGCTG TGGCTGATAG CCCCAGCAGG GCCTGCACCT GTGTCCCACC CCACCCACAG

        70         80         90        100        110        120
ACGGCCTTCT GCAATTCCGA CCTCGTCATC AGGGCCAAGT TCGTGGGGAC ACCAGAAGTC

       130        140        150        160        170        180
AACCAGACCA CCTTATACCA GCGTTATGAG ATCAAGATGA CCAAGATGTA TAAAGGGTTC

       190        200        210        220        230        240
CAAGCCTTAG GGGATGCCGC TGACATCCGG TTCGTCTACA CCCCCGCCAT GGAGAGTGTC

       250        260        270        280        290        300
TGCGGATACT TCCACAGGTC CCACAACCGC AGCGAGGAGT TTCTCATTGC TGGAAAACTG

       310        320        330        340        350        360
CAGGATGGAC TCTTGCACAT CACTACCTGC AGTTTCGTGG CTCCCTGGAA CAGCCTGAGC

       370        380        390        400        410        420
TTAGCTCAGC GCCGGGGCTT CACCAAGACC TACACTGTTG GCTGTGAGGA ATGCACAGTG

       430        440        450        460        470        480
TTTCCCTGTT TATCCATCCC CTGCAAACTG CAGAGTGGCA CTCATTGCTT GTGGACGGAC

       490        500        510        520        530        540
CAGCTCCTCC AAGGCTCTGA AAAGGGCTTC CAGTCCCGTC ACCTTGCCTG CCTGCCTCGG

       550        560        570        580        590        600
GAGCCAGGGC TGTGCACCTG GCAGTCCCTG CGGTCCCAGA TAGCCTGAAT CCTGCCCGGA

       610        620        630        640       650         660
GTGGAAGCTG AAGCCTGCAC AGTGTCCACC CTGTTCCCAC TCCCATCTTT CTTCCGGACA

       670        680        690        700
ATGAAATAAA GAGTTACCAC CCAGCAAAAA AAAAAAGGAA TTC
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4. The portable DNA sequence of claim 2 wherein said sequence is capable of directing intracellular production of a collagenase inhibitor biologically equivalent to that isolable from human skin fibroblasts.

5. A recombinant-DNA cloning vector comprising a nuclectide sequence capable of directing intracellular production of metalloproteinase inhibitors.

6. The vector of claim 5 wherein said vector comprises a nucleotide sequence containing at least the following nucleotides:

```
        10         20         30         40         50         60
GTTGTTGCTG TGGCTGATAG CCCCAGCAGG GCCTGCACCT GTGTCCCACC CCACCCACAG

        70         80         90        100        110        120
ACGGCCTTCT GCAATTCCGA CCTCGTCATC AGGGCCAAGT TCGTGGGGAC ACCAGAAGTC

       130        140        150        160        170        180
AACCAGACCA CCTTATACCA GCGTTATGAG ATCAAGATGA CCAAGATGTA TAAAGGGTTC

       190        200        210        220        230        240
CAAGCCTTAG GGGATGCCGC TGACATCCGG TTCGTCTACA CCCCCGCCAT GGAGAGTGTC

       250        260        270        280        290        300
TGCGGATACT TCCACAGGTC CCACAACCGC AGCGAGGAGT TTCTCATTGC TGGAAAACTG

       310        320        330        340        350        360
CAGGATGGAC TCTTGCACAT CACTACCTGC AGTTTCGTGG CTCCCTGGAA CAGCCTGAGC

       370        380        390        400        410        420
TTAGCTCAGC GCCGGGGCTT CACCAAGACC TACACTGTTG GCTGTGAGGA ATGCACAGTG

       430        440        450        460        470        480
TTTCCCTGTT TATCCATCCC CTGCAAACTG CAGAGTGGCA CTCATTGCTT GTGGACGGAC

       490        500        510        520        530        540
CAGCTCCTCC AAGGCTCTGA AAAGGGCTTC CAGTCCCGTC ACCTTGCCTG CCTGCCTCGG

       550        560        570        580        590        600
GAGCCAGGGC TGTGCACCTG GCAGTCCCTG CGGTCCCAGA TAGCCTGAAT CCTGCCCGGA

       610        620        630        640        650        660
GTGGAAGCTG AAGCCTGCAC AGTGTCCACC CTGTTCCCAC TCCCATCTTT CTTCCGGACA

       670        680        690        700
ATGAAATAAA GAGTTACCAC CCAGCAAAAA AAAAAAGGAA TTC
```

7. The vector pUC9-F5/237P10.

8. A recombinant-DNA method for microbial production of a metalloproteinase inhibitor comprising:

(a) preparation of a portable DNA sequence capable of directing a host microorganism to produce a protein having metalloproteinase inhibitor activity;

(b) cloning the portable DNA sequence into a vector capable of being transferred into and replicating in a host microorganism, such vector containing operational elements for the portable DNA sequence;

(c) transferring the vector containing the portable DNA sequence and operational elements into a host microorganism capable of expressing the metalloproteinase inhibitor protein;

(d) culturing the host microorganism under conditions appropriate for amplification of the vector and expression of the inhibitor; and

(e) in either order:

(i) harvesting the inhibitor; and

(ii) causing the inhibitor to assume an active, tertiary structure whereby it possesses metalloproteinase inhibitor activity.

9. The method of claim 8 wherein said metalloproteinase inhibitor is collagenase inhibitor.

10. The method of claim 8 wherein said portable DNA sequence is:

```
        10          20          30          40          50          60
GTTGTTGCTG TGGCTGATAG CCCCAGCAGG GCCTGCACCT GTGTCCCACC CCACCCACAG

        70          80          90         100         110         120
ACGGCCTTCT GCAATTCCGA CCTCGTCATC AGGGCCAAGT TCGTGGGGAC ACCAGAAGTC

       130         140         150         160         170         180
AACCAGACCA CCTTATACCA GCGTTATGAG ATCAAGATGA CCAAGATGTA TAAAGGGTTC

       190         200         210         220         230         240
CAAGCCTTAG GGGATGCCGC TGACATCCGG TTCGTCTACA CCCCCGCCAT GGAGAGTGTC

       250         260         270         280         290         300
TGCGGATACT TCCACAGGTC CCACAACCGC AGCGAGGAGT TTCTCATTGC TGGAAAACTG

       310         320         330         340         350         360
CAGGATGGAC TCTTGCACAT CACTACCTGC AGTTTCGTGG CTCCCTGGAA CAGCCTGAGC

       370         380         390         400         410         420
TTAGCTCAGC GCCGGGGCTT CACCAAGACC TACACTGTTG GCTGTGAGGA ATGCACAGTG

       430         440         450         460         470         480
TTTCCCTGTT TATCCATCCC CTGCAAACTG CAGAGTGGCA CTCATTGCTT GTGGACGGAC

       490         500         510         520         530         540
CAGCTCCTCC AAGGCTCTGA AAAGGGCTTC CAGTCCCGTC ACCTTGCCTG CCTGCCTCGG

       550         560         570         580         590         600
GAGCCAGGGC TGTGCACCTG GCAGTCCCTG CGGTCCCAGA TAGCCTGAAT CCTGCCCGGA

       610         620         630         640         650         660
GTGGAAGCTG AAGCCTGCAC AGTGTCCACC CTGTTCCCAC TCCCATCTTT CTTCCGGACA

       670         680         690         700
ATGAAATAAA GAGTTACCAC CCAGCAAAAA AAAAAAGGAA TTC
```

11. The method of claim 8 wherein said vector containing said portable DNA sequence is pUC9-F5/237P10.

12. The method of claim 8 wherein said host microorganism is a bacterium.

13. The method of claim 12 wherein said bacterium is a member of the genus *Bacillus*.

14. The method of claim 13 wherein said bacterium is *Bacillus subtilis*.

15. The method of claim 12 wherein said bacterium is *Escherichia coli.*

16. The method of claim 12 wherein said bacterium is a member of the genus *Pseudomonas.*

17. The method of claim 16 wherein said bacterium is *Pseudomonas aeruginosa.*

18. The method of claim 8 wherein said host microorganism is a yeast.

19. The method of claim 8 wherein said yeast is *Saccharomyces cerevisiae.*

20. The method of claim 8 wherein said inhibitor is harvested prior to being caused to assume said active, tertiary structure.

21. The method of claim 8 wherein said inhibitor is caused to assume said active, tertiary structure prior to being harvested.

22. A metalloproteinase inhibitor which is biologically equivalent to the collagenase inhibitor isolable from human skin fibroblasts produced by the method of claim 8.

23. The microorganism C600/pUC9-F5/237P10 having ATCC Accession No. 53003.

24. The portable DNA sequence of claim 1 wherein said nucleotide sequence is:

```
         10          20          30          40          50          60
GGCCATCGCC GCAGATCCAG CGCCCAGAGA GACACCAGAG AACCCACCAT GGCCCCCTTT

         70          80          90         100         110         120
GACCCCTGGC TTCTGCATCC TGTTGTTGCT GTGGCTGATA GCCCCAGCAG GGCCTGCACC

        130         140         150         160         170         180
TGTGTCCCAC CCCACCCACA GACGGCCTTC TGCAATTCCG ACCTCGTCAT CAGGGCCAAG

        190         200         210         220         230         240
TTCGTGGGGA CACCAGAAGT CAACCAGACC ACCTTATACC AGCGTTATGA GATCAAGATG
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       250        260        270        280        290        300
ACCAAGATGT ATAAAGGGTT CCAAGCCTTA GGGGATGCCG CTGACATCCG GTTCGTCTAC

       310        320        330        340        350        360
ACCCCCGCCA TGGAGAGTGT CTGCGGATAC TTCCACAGGT CCCACAACCG CAGCGAGGAG

       370        380        390        400        410        420
TTTCTCATTG CTGGAAAACT GCAGGATGGA CTCTTGCACA TCACTACCTG CAGTTTCGTG

       430        440        450        460        470        480
GCTCCCTGGA ACAGCCTGAG CTTAGCTCAG CGCCGGGGCT TCACCAAGAC CTACACTGTT

       490        500        510        520        530        540
GGCTGTGAGG AATGCACAGT GTTTCCCTGT TTATCCATCC CCTGCAAACT GCAGAGTGGC

       550        560        570        580        590        600
ACTCATTGCT TGTGGACGGA CCAGCTCCTC CAAGGCTCTG AAAAGGGCTT CCAGTCCCGT

       610        620        630        640        650        660
CACCTTGCCT GCCTGCCTCG GGAGCCAGGG CTGTGCACCT GGCAGTCCCT GCGGTCCCAG

       670        680        690        700        710        720
ATAGCCTGAA TCCTGCCCGG AGTGGAAGCT GAAGCCTGCA CAGTGTCCAC CCTGTTCCCA

       730        740        750        760        770        780
CTCCCATCTT TCTTCCGGAC AATGAAATAA AGAGTTACCA CCCAGCAAAA AAAAAAAGGA
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